

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 (Currently amended): A method for controlling operation of a flotation cell receiving a pulp suspension having impurities and discharging a pulp suspension accept and a foam having the impurities, the cell comprising a plurality of sub-cells and having a liquid level controller measuring and controlling the cell liquid level and a foam level controller measuring the foam level in one sub-cell or only in one part of the sub-cells and controlling the cell foam level, the method comprising the steps of:

measuring at least one quality characteristic of the pulp suspension accept discharged from the cell; and

setting a value for the cell foam level within the foam level controller, the value of the cell foam level being determined by the measured value of the at least one quality characteristic; and

varying a flow of a liquid through a self-priming nozzle to control the cell foam level.

2 (Original): The method of Claim 1 wherein the quality characteristic is selected from brightness, whiteness, color type, number of dirt specks and number of stickies in the accept.

3-5 (Canceled)

6 (Original): The method of Claim 1 wherein the method is implemented in a primary flotation cell.

7 (Original): The method of Claim 1 wherein the method is implemented in a secondary flotation cell.

8 (Original): The method of Claim 1 wherein the suspension is a pulp suspension and the foam contains ink removed from the pulp suspension.

9 (Original): The method of Claim 1 further comprising the step of setting a value for the cell liquid level within the liquid level controller, the value of the cell liquid level be determined by the measured value of the at least one quality characteristic.

10 (Currently amended): A method for controlling operation of a flotation cell receiving a pulp suspension having impurities and discharging a pulp suspension accept and a foam having the impurities, the cell comprising a plurality of sub-cells and having a liquid level controller measuring and controlling the cell liquid level and a foam level controller measuring the foam level in one sub-cell or only in one part of the sub-cells and controlling the cell foam level, the method comprising the steps of:

measuring at least one quality characteristic of the pulp suspension accept discharged from the cell;

setting a value for the cell foam level within the foam level controller, the value of the cell foam level being determined by the measured value of the at least one quality characteristic; and

setting a value for the cell liquid level within the liquid level controller, the value of the cell liquid level be determined by the measured value of the at least one quality characteristic ; and

varying a flow of a liquid through a self-priming nozzle to control the cell foam level.

11 (Currently amended): A method for controlling operation of a flotation cell receiving a pulp suspension having impurities and discharging a pulp suspension accept and a foam having the impurities, the cell comprising a plurality of sub-cells and having a liquid level controller measuring and controlling the cell liquid level and a foam level controller measuring the foam level in one sub-cell or only in one part of the sub-cells and controlling the cell foam level, the method comprising the steps of:

measuring at least one quality characteristic of the pulp suspension accept discharged from the cell; and

setting a value for the cell foam level within the foam level controller or setting a value for the cell liquid level within the liquid level controller, the value of the level being determined by the measured value of the at least one quality characteristic ; and

varying a flow of a liquid through a self-priming nozzle to control the cell foam level.

12 (Currently amended): The method of Claim 4 1 wherein the foam level is controlled in each of the sub-cells.

13 (Currently amended): The method of Claim 5 1 wherein the foam level is controlled in one sub-cell or only in one part of the sub-cells.

14 (Currently amended): The method of Claim 3 1 wherein the liquid level is measured in each of the sub-cells.

15 (Original): The method of Claim 14 wherein the liquid level is controlled in each of the sub-cells.

16 (Currently amended): The method of Claim 3 1 wherein the liquid level is measured in one sub-cell or only in one part of the sub-cells.

17 (Original): The method of Claim 16 wherein the liquid level is controlled in one sub-cell or only in one part of the sub-cells.

18 (Currently amended): The method of Claim 3 1 wherein the liquid level and foam level are measured and controlled in each of the sub-cells.

19 (Currently amended): The method of Claim 3 1 wherein the liquid level and foam level are measured and controlled in one sub-cell or only in one part of the sub-cells.